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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/569,317

02/22/2006

Jiecai Gan

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GLOBAL IP SERVICES

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EXAMINER

YOUNKINS, KAREN L

ART UNIT

PAPER NUMBER

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MAIL DATE

DELIVERY MODE

03/11/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/569,317	Applicant(s) GAN, JIECAI	
	Examiner KAREN YOUNKINS	Art Unit 3751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11, 19, 21 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 19, 21 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is responsive to the amendment dated 1/20/2010 and the request for continued examination received on 2/23/2010. Responsive to the amendment, claims 11, 19, 21, and 29 are currently pending in the case.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it includes legal phraseology such as "comprises," and it is not in proper idiomatic English. Correction is required. See MPEP § 608.01(b).
4. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.
5. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not

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clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: The term 'conduct' is used throughout the specification as a non-art known term. The term 'adjustable' is used to describe the operation of the air valve 44, however the air valve 44 is only disclosed as being rotatable about its pivot (page 5). The term 'adjustable' is an inappropriate term to describe this operation.

6. In the remarks submitted 1/20/2010, the applicant indicated that a substitute specification and abstract in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) would be submitted with the filing of an RCE. However, no such substitute specification and abstract has been received.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 11, 19, 21, and 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

9. The claimed limitation of "other inlet is located on a ceiling of the toilet and opened to the toilet" as required in claim 11 lines 7-8 was not described in the

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specification in such a way as to enable one skilled in the art to make and/or use the invention. There is no toilet ceiling described in the specification, nor is the examiner aware of a toilet ceiling well known in the art. The claimed limitation of a "pipe tee" recited in claim 19 was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. A discussion of a 'pipe tee' was not found.

10. The use of both an air separate plate and two inlets as now set forth in claim 11 was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. The combination of these limitations appears to be a hybrid embodiment of the embodiment of figure 2 having an air separate plate and the embodiment depicted in figure 3 having two inlets each directed from a toilet. The specification does not discuss how these two embodiments could be combined.

11. Claim 29 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed does not disclose the inlet for the water closet being a butterfly air vent valve nor the air valve of the inlet for the toilet being a gate air vent valve as claimed in new claim 29.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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13. Claims 11, 19, 21, and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

14. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. These grammatical and idiomatic errors render the claims indefinite. Exemplary examples rendering claim 11 indefinite include “the distribution of exhausting air displacement for the exhaust fan is realized”, “an outlet of the exhaust fan is connected to outdoor through a duct”. In claim 21, the language “wherein an overflow tube in water tank of a water closet is connected...” renders the claim indefinite.

15. Regarding claim 11, it is unclear what the relationship between water closet and toilet is. Line 8 states “a water closet in a toilet”, indicating that the water closet and toilet are at least in part the same structure. The new limitations set forth in lines 20-26 seem to indicate that the water closet is separate from the toilet. The specification does not disclose the watercloset being separate from the toilet, as such for the purposes of examination the examiner assumed that an inlet of the air dividing case is connected to a toilet/water closet satisfies this limitation. Regarding claim 19, it is unclear what portion of the system the claimed 'duct' is referring to as this is not discussed in the specification.

16. In light of the rejections above and the confusing nature of the specification, the claims are examined as best understood.

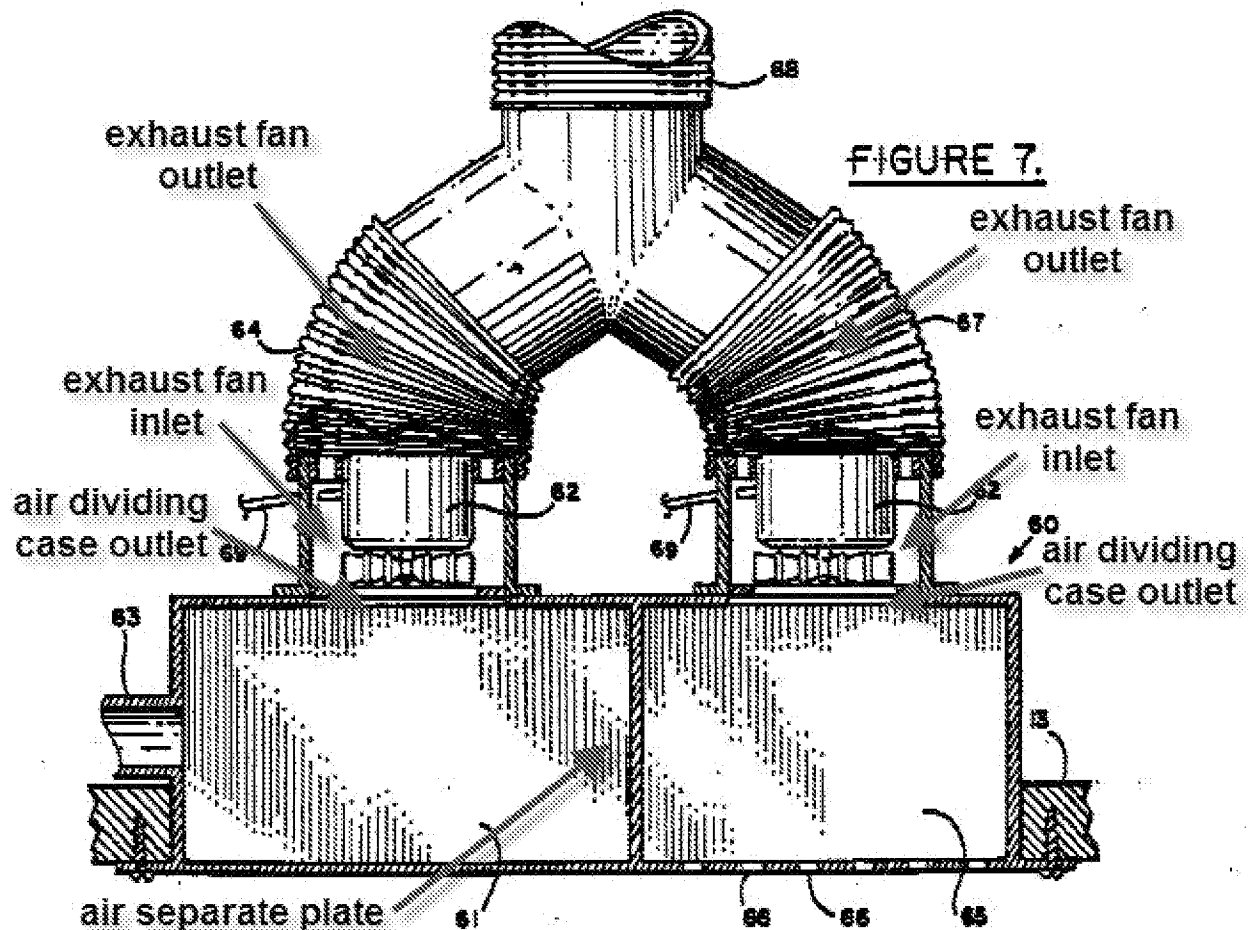
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Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 11, 21, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,010,600 to Prisco in view of U.S. Patent No. 5,029,316 to Fernald, Sr. (Fernald).



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19. Regarding claim 11, Prisco discloses, with attention drawn particularly the embodiment disclosed in figure 7, an exhausting apparatus with an air dividing case (surrounding compartments 61 and 65) for a water closet (10) comprising an air dividing case having an inner chamber (61/65) with an outlet at a top of the air dividing case (see examiner annotated drawing above) and an inlet (via 63) connected with a water closet (see column 4 lines 12-14). The exhausting apparatus also includes an exhaust fan (62) with an outlet and inlet connected with the outlet of said inner chamber (see examiner annotated drawing above) that is fixed on top of the air dividing case as claimed. The outlet of the exhaust fan is connected to the outdoors through a duct (67), see column 4 lines 16-22. Further, Prisco discloses the inner chamber having through holes via the screened openings 66. The screen/'lid' covering the openings is 'moveable' on and off of the openings. The inner chamber has an 'air separate plate' inside of it, see examiner annotated drawing above. The 'air separate plate' divides the inner chamber into two chambers (61 and 65) such that one chamber (61) leads to the water closet (10). Prisco also discloses the use of the 'air separate plate' dividing the inner chamber into dual compartments may be required in rooms having a plurality of toilets, see column 4 lines 22-24. Further, the outlet is separated by the air separate plate into two parts to the extent claimed, and the apparatus is installed on a ceiling of a room housing a toilet (see figure 1). The apparatus is "open" to the toilet as it is connected to the toilet via the air system.

Prisco fails to show an air valve located between the inner chamber inlet and the inner chamber. Prisco also fails to disclose the second chamber (65) leading to another water closet/toilet.

Fernald teaches an air valve (36) as claimed, see column 4 lines 17-24. The air valve (36) is located between the inlet (designated by arrow pointing towards 70 in Figure 1) and an inner chamber (48). Fernald teaches the use of such an air valve results in prevention of air entering the inner chamber when it is not in operation, see column 2 lines 5-10.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the 'adjustable' air valve located between the inner chamber inlet and the inner chamber as taught by Fernald in the exhausting apparatus of Prisco to prevent entry of air into the inner chamber when not operating. It would have been further obvious to have connected the second chamber 65 to another water closet/toilet, as Prisco discloses the chamber as claimed may be required in rooms having a plurality of toilets. Therefore, one part of the outlet is connected with one of the water closets (toilets) and the other part of the outlet is connected to the other water closet (toilet).

The initial statement of intended use (claim 1 line 2), and all other functional implications have been fully considered but do not appear to impose any patentably distinguishing structure over that disclosed by Prisco and Fernald.

20. Regarding claim 21, as previously discussed in pp-19 above, further Prisco fails to disclose the inlet of the inner chamber being connected via an overflow tube in the

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water tank of the flush closet. Instead, Prisco teaches the inlet of the inner chamber connected to the rear exhaust hole of the water closet.

With attention drawn to the embodiment disclosed in figures 6-8 of Fernald, Fernald teaches exhaust air being drawn out of an overflow tube (32) in the water tank (20) of a water closet via a duct (136) and into the inlet of an inner chamber (148).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have further modified the exhausting apparatus of Prisco as discussed in pp-16 and 17 above by connecting the inlet of the inner chamber to an overflow tube in the water tank of the flush closet via a duct in order to avoid the unsightly connection of a conduit with the toilet's rear exhaust hole and inner chamber inlet.

21. Regarding claim 29, the examiner takes official notice that both butterfly and gate valves are well known in the art. To choose to use these valves as the air vent valve to any of the claimed watercloset/toilets would be an obvious design choice to one having ordinary skill in the art.

22. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prisco and Fernald as applied to claims 11 and 13 above, and further in view of USPN 4,165,544 to Barry.

23. As previously discussed in pp-19 above, further Prisco discloses the inlet of the inner chamber connected (via conduit 28/30/31) to the rear exhaust hole (20) of the water closet (10). Note, the exhaust leaves the water closet through the rear, s.f. 1.

Prisco fails to show the rear exhaust hole being a T shaped "pipe tee" in the arrangement claimed.

Barry teaches a T-type connector / "pipe tee" being known in the art to move air from a rear exhaust hole to an exhausting apparatus.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the exhausting apparatus of Prisco to have a T-type rear exhaust hole in the claimed arrangement to accommodate for various size constraints of the specific plumbing and room constraints.

Response to Arguments

24. Applicant's arguments filed 1/20/2010 have been fully considered but they are not persuasive.

25. On page 5 of the arguments dated 1/20/2010 the applicant has asserted that the deficiencies indicated by the examiner are overcome by the amendments to the claims with respect to the rejections under 35 U.S.C. 112. However, it is respectfully submitted that many of the deficiencies indicated by the examiner have not been overcome by the amendments to the claims. See the discussion in pp-7 to pp-16 above.

26. On page 6-7 of the arguments, the applicant has asserted that the apparatus of claim 11 can use one exhaust fan to exhaust the air both from the water closet and of the toilet. It is respectfully noted that the limitations regarding relationship between the water closet and the toilet are unclear as discussed in the rejection of claim 11 under 35 U.S.C. 112, 2nd paragraph above. Further, it is respectfully submitted that this argument is not commensurate with the scope of the claims. The claim language reads

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“an exhaust fan being fixed on the top of the air dividing case”. The claim does not specifically recite that a single exhaust fan draws from two separate compartments as asserted by the applicant.

27. On pages 7-8, the applicant has asserted that the air valve 36 of Fernald does not meet the functional language of “for air displacement”. However, the examiner respectfully disagrees. The valve 36 displaces air from one side of the valve to the other, the valve thus performing the operation of air displacement to the extent claimed.

28. On pages 8-9 the applicant discusses the relationship between the newly added claim limitation of the "pipe tee" and the water closet/toilet bowl. The applicant states that the result of the prior art is "not good". The examiner is unsure what the applicant is arguing. The language "connected" in the newly amended claim language is met as the system as the structural components of the device as modified above are connected. Further, it is unclear what portion of the system the claimed 'duct' is referring to as this is not discussed in the specification as discussed above and indicated in the previous office actions. The examiner is unsure what the applicant means by the argument “The exhaust line having big inner passing way for air and avoid the sinuousness. Therefore, the resistance force is greatly reduced. The exhausting force is big and the appearance is good.” The structural nor functional implications of these statements are not discussed in the specification.

29. Applicant's arguments with respect to claim 29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAREN YOUNKINS whose telephone number is (571)270-7417. The examiner can normally be reached on Monday through Friday 7:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571)272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. Y./
Examiner, Art Unit 3751

/Gregory L. Huson/
Supervisory Patent Examiner, Art Unit 3751